

CLAIMS

- 5 1. An article containing at least one volatile material, said article comprising a mechanism that is capable of communicating information with a device, said device being of a type that enables the release of said at least one volatile material.
2. The article of Claim 1 wherein said at least one volatile material comprises a scented material.
- 10 3. The article of Claim 1 wherein said mechanism is capable of one of the following: transmitting information to a device; receiving information from a device; and both transmitting information to a device and receiving information from a device.
- 15 4. The article of Claim 1 wherein said mechanism comprises at least one of the following: (1) an electrical contact associated with the article capable of being read by electrical circuitry associated with the device; (2) a conductive label associated with the article that mates with a contact associated with the device; (3) an optical mechanism associated with the article capable of being read by the device; (4) at least one change in topography on the article that is capable of being read by a sensor associated with the device; and (5) a radio frequency identification tag associated with the article which communicates with the device.
- 20 5. The article of Claim 1 wherein said information is selected from the group comprising at least one of the following: (1) at least one volatile material-specific release or volatilization parameter, (2) volatilization energy application program selection, (3) a name associated with one or more volatile materials, (4) history of use of an article comprising volatile material, and (5) sequence of volatilization energy application programs.
- 25 6. The article of Claim 1 wherein information relating to at least one volatilization parameter of at least one volatile material is stored on or in said article.
7. The article of Claim 6 wherein said information is stored as a single parameter for more than one volatile material contained on or in said article.
- 30 8. The article of Claim 5 wherein the information relating to the history of use is based on the application of at least one of the following volatilization parameters specific to at least one volatile material: the time period over which the volatile material is emitted, and the intensity at which the volatile material is emitted.

9. The article of Claim 1 comprising two or more separate volatile materials, said article being for use in conjunction with a device that has more than one emission program for emitting volatile materials, wherein said article is capable of communicating to the device which emission program to activate for each of said two or more volatile materials.
- 5 10. The article of Claim 1 comprising one or more separate volatile materials, said article being for use in conjunction with a device that has more than one emission program for emitting volatile materials, wherein said article is capable of communicating to the device specific volatilization parameters for each of one or more volatile materials.
- 10 11. An article containing at least one volatile material, said article of a type that is used in conjunction with a device for emitting volatile material, said article comprising an indicator which shows the amount that the article has been used, said indicator being changed by the device each time the article is used with the device.
- 15 12. A device for use in emitting volatile materials from an article containing a volatile material, said device comprising a component that is capable of communication with an article containing at least one volatile material.
- 20 13. A system for emitting volatile material, said system comprising:
- (a) a device for use in emitting volatile materials from an article containing a volatile material; and
 - (b) an article containing at least one volatile material wherein said device and article comprise components of the system, and at least one of said article and said device comprises a mechanism that is capable of exchanging information with the other component of the system.
- 25 14. A method for controlling the emission of volatile material, said method comprising the steps of:
- (a) providing a device for use by a user in emitting volatile materials from an article containing at least one volatile material;
 - (b) providing an article to a user, said article containing at least one volatile material, said article comprising a mechanism that is capable of exchanging information with said device; and
 - 30 (c) associating the article with the device for the emission of at least one volatile material, wherein information is exchanged between the article and the device.

15. The method of Claim 14 wherein said information is communicated in one of the following manners: from the article to the device; from the device to the article; and both from said article to said device and from said device to said article.

5 16. An article containing at least one volatile material, said article being configured for use in conjunction with a device for emitting volatile materials wherein the device provides at least two choices of volatile material-specific emission modes from which a user of the device may choose for emitting the volatile material from the article using the device, and said article comprises a mechanism that is capable of communicating information to a user of said article which choice of volatile material-specific mode of emission provided by the device to select.

10 17. The article of Claim 16 wherein at least one volatile material comprises a scented material.

18. The article of Claim 16 wherein at least two of the emission modes differ in at least one of the following parameters:

- 15 (a) temperature to which the volatile material is heated;
- (b) duration of heating;
- (c) intervals between heating;
- (d) speed at which a fan that disperses the volatile material operates;
- (e) duration of operation of a fan; and
- 20 (f) intervals between operation of a fan.

19. A device for use in emitting volatile materials from an article containing a volatile material, said device comprising at least two choices of volatile material-specific emission modes from which a user of the device may choose for emitting the volatile material from the article using the device.

25 20. A system for emitting volatile material, said system comprising:

- (a) a device for use in emitting volatile materials from an article containing a volatile material, said device having more than one volatile material-specific mode of emission; and
- 30 (b) an article containing at least one volatile material, said article being configured for use in conjunction with said device wherein said article comprises a mechanism

that is capable of communicating information to a user of said article to select a volatile material-specific mode of emission provided by the device.

21. A method for controlling the emission of volatile material, said method comprising the steps of:

(a) providing a device for use by a user in emitting volatile materials from an article containing at least one volatile material, said device having more than one volatile material-specific mode of emission;

(b) providing an article to a user, said article containing at least one volatile material, said article comprising a mechanism that is capable of communicating information to a user of said article to select a volatile material-specific mode of emission provided by the device; and

(c) communicating information from said article to the user of the article to select a volatile material-specific mode of emission provided by the device.

22. An article containing at least one volatile material, said article being configured for use in conjunction with a device for emitting volatile materials wherein said device provides more than one volatile material-specific mode for the release of volatile materials, said article comprising a mechanism that is capable of communicating information with at least one of the device or a person using the device to select a volatile material-specific mode of emission provided by the device.

23. A device for use in emitting volatile material from an article containing at least one volatile material, said device having more than one volatile material-specific mode for the release of volatile materials, said device comprising controls for controlling parameters relating to the release of a volatile material, said controls being related to factors that are independent of the specific type of volatile material.

24. A system for emitting volatile material, said system comprising:

(a) a device for use in emitting volatile material from an article containing at least one volatile material, said device having more than one volatile material-specific mode of emission, and controls for controlling parameters relating to the release of a volatile material, said controls being related to factors that are independent of the specific type of volatile material; and

(b) an article containing at least one volatile material wherein said article comprising a mechanism that is capable of exchanging information regarding the volatile

material-specific mode of emission with at least one of said device or a person using the device.

25. A method for controlling the emission of volatile material, said method comprising the steps of:

(a) providing a device for use by a user in emitting volatile material from an article containing at least one volatile material, said device having more than one volatile material-specific mode of emission, and controls for controlling parameters relating to the release of a volatile material, said controls being related to factors that are independent of the specific type of volatile material;

(b) providing an article to a user, said article containing at least one volatile material, said article comprising a mechanism that is capable of communicating information to at least one of the user and the device regarding the volatile material-specific mode of emission; and

(c) allowing the user to operate said controls to control at least one factor that is independent of the specific type of volatile material.

26. The method of Claim 25 wherein the controls operated by the user are capable of modifying the volatile material-specific mode of emission but not overriding said volatile material-specific mode of emission.

27. A method for releasing scented material, said method comprising:

providing at least one scented material; and

releasing said at least one scented material discontinuously and automatically so that said at least one scented material displays a non-constant in-air concentration over a period of time.

28. The method of Claim 27 in which the scented material is released in at least one of the following manners: random bursts of scented material; the gradual increase or decrease in concentration through the duration of emission; and the intentional drop in concentration below sensory limits.

29. A system for emitting volatile material, said system comprising:

(a) a device for use in emitting volatile material from an article containing at least one volatile material, said device having more than one volatile material-specific mode of emission sequenced to run in a predetermined order; and

- (b) an article comprising multiple, separate volatile materials in an arrangement that coincides with the predetermined sequence of volatile material-specific mode of emission on the device.

30. A system for emitting volatile material, said system comprising:

- (a) a device for use in emitting volatile materials from an article containing at least one volatile material, said device being capable of delivering at least two different volatilization energy applications comprised of at least one of the following: volatilization energies, volatilization durations, and volatilization frequencies; and
- (b) one or more articles each containing at least one volatile material,

wherein said device is capable of automatically adjusting at least one of the following for different volatile materials: the intensity, the duration, and the frequency of volatilization energy application, when said one or more articles are used with the device.

31. A system for emitting volatile materials, said system comprising:

- (a) a device for use in emitting volatile materials from an article containing at least one volatile material, said device comprising an energy source, and being capable of providing volatilization energy to an article comprising one or more volatile materials; and
- (b) an article containing one or more volatile materials for use with said device, wherein said article is configured to automatically alter the level of volatilization energy that reaches at least one of the volatile materials when said article is used in association with said device.

32. The system of Claim 31 comprising at least one of the following: insulating material positioned between the energy source and the volatile material; films of different porosity positioned between the volatile material and the atmosphere; and a mechanism that adjusts the distance between the volatile material and the energy source.

33. A system for emitting volatile material, said system comprising:

- (a) a device for use in emitting volatile materials from an article containing at least one volatile material, said device being capable of delivering one or more different volatilization energy application programs; and

- (b) an article which is capable of altering the amount of energy received by the volatile material, dependent on the properties of the volatile material.

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